# Positive Train Control Installation Program

# Lakewood and Tacoma, Washington

# SEPA Checklist

Date Submitted: _____

Prepared by:

# STATE ENVIRONMENTAL POLICY ACT (SEPA) ENVIRONMENTAL CHECKLIST

## A. BACKGROUND

1. **Name of proposed project, if applicable:**

   Sound Transit Positive Train Control (PTC) Installation Program

2. **Name of applicant:**

   Sound Transit

3. **Address and phone number of applicant and contact person:**

   Ms. Elma Borbe
   Environmental Planner
   Office of Environmental Affairs & Sustainability
   Union Station
   401 S. Jackson St.
   Seattle, WA 98104-2826
   T] (206)398-5445
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4. **Date checklist prepared**

   March 13, 2014

5. **Agency requesting checklist:**

   Sound Transit

6. **Proposed timing or schedule (including phasing, if applicable):**

   The tower for the first location is scheduled to start late May but could be early June. Once a tower is installed the remaining work (trenches, dropping cable etc.) for the location will be completed at that time. System will be operational no later than December 31, 2014. Construction is scheduled for completion in 144 days.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

   Sound Transit has completed a National Environmental Policy Act (NEPA) checklist of the proposed towers in accordance with Federal Communication Commission (FCC) requirements. No additional towers are proposed for the Sound Transit system.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

   Sound Transit has completed Federal Communications Commission (FCC) National Environmental Policy Act (NEPA) review of the proposed tower construction. The FCC is the lead agency for NEPA review of the proposed towers. Section 7 of the Endangered Species Act process is being conducted. Compliance with FCC NEPA review requires completion of the nine point FCC Screening Checklist and submittal of the FCC 620 form to document compliance with Section 106 of the National Historic Preservation Act. Appendix B is an Endangered Species Act Screening Checklist for analysis of the effect

of the proposed towers on National Marine Fisheries Service listed salmonid species in Puget Sound.

9. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.**

   There are no pending governmental approvals at this time.

10. **List any government approvals or permits that will be needed for your proposal, if known.**

    Installation of the 12 communication towers will require Cities of Lakewood and Tacoma, Washington (WA) building permits. Approval from the Cities of Lakewood and Tacoma, WA may be required for temporary street closures at specific towers during construction.

11. **Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)**

    Sound Transit proposes to construct 12 new communication towers adjacent to the existing Sound Transit rail line within urban areas of the Cities of Lakewood and Tacoma, Pierce County, Washington (WA). The proposed towers will be 60 feet in height, self-supporting monopoles, and will not contain guy wires nor lighting. The construction foot print will be limited to a five-foot by five foot area at the base of the tower and no access roads or improvements will be required. The radio equipment of the towers will be powered from the adjacent pre-existing control structures through trenched conduits. The towers are the principal component of a federally mandated Positive Train Control (PTC) communication network. PTC systems are integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency. The locations of the 12 proposed towers are displayed on Figure 1 below.

    The proposed towers will be built on previously developed rail Right of Way (ROW) in conjunction with existing railroad infrastructure. The tower footings will be placed in a five foot by five foot excavation. Electrical conduits and cables will be trenched to the existing control bungalows through narrow excavated trenches. The section where the PTC Towers are proposed for the Sound Transit rail line will connect downtown Tacoma with the City of Lakewood, WA. The rail corridor area proposed for the PTC Communication Tower locations is zoned as an Industrial use area.

12. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should**

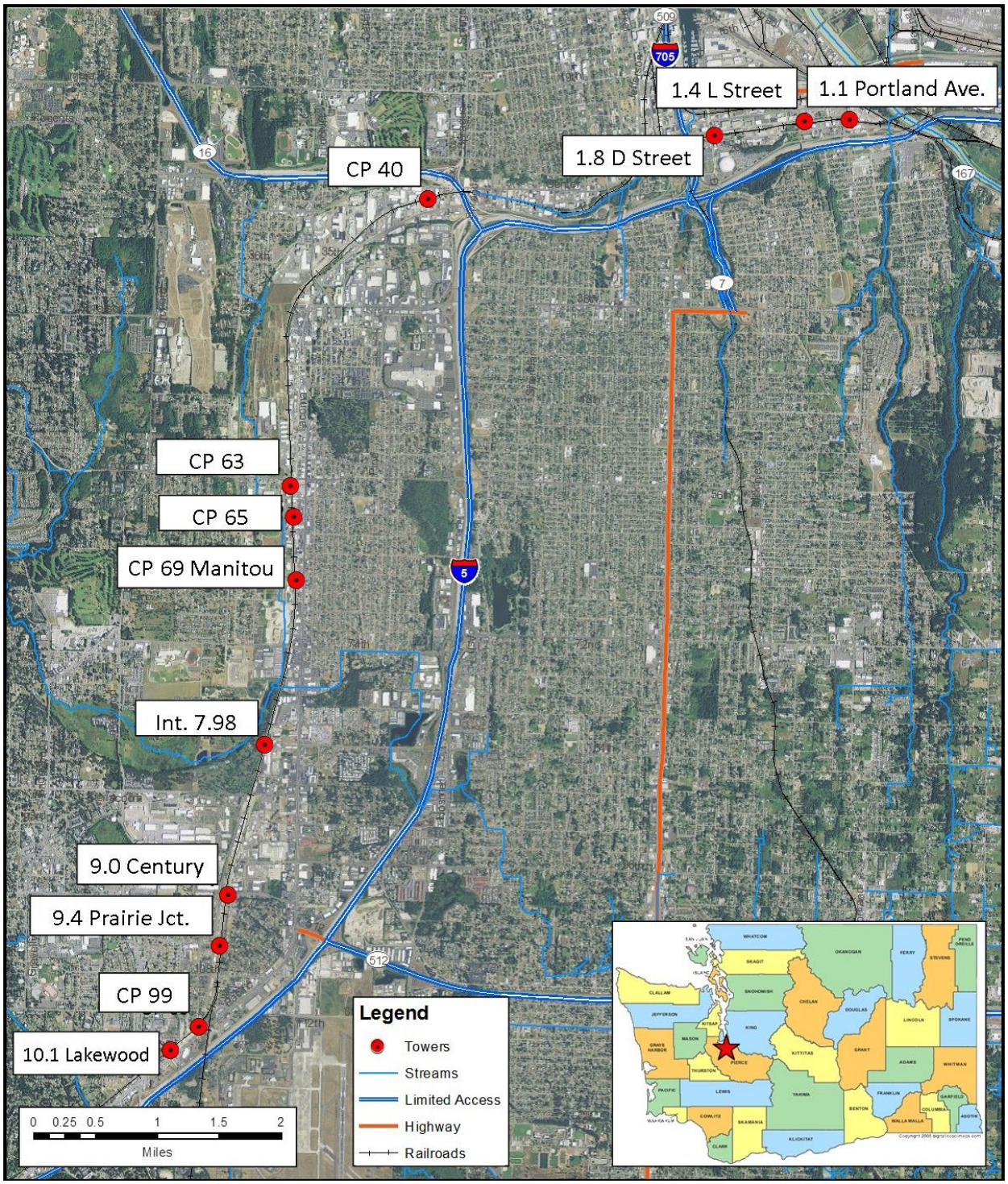
**submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

Sound Transit proposes to construct twelve (12) communication towers along the Right of Way (ROW) of the Sound Transit rail system linking downtown Tacoma with Lakewood, Washington (WA). The communication towers will be installed as part of a Positive Train Control (PTC) system to provide continuous communication of train locations. Installation of the PTC system will improve safety of rail traffic. The purpose of this report is to describe the environmental conditions present at the following proposed tower locations:

| **Tower Identification** | **Latitude** | **Longitude** |
|---|---|---|
| Tower 1.1 Portland Avenue – | 47° 14’ 27.9” N | -122° 24’ 36.8” W |
| Tower 1.4 L Street – | 47° 14’ 27.0” N | -122° 24’ 58.8” W |
| Tower 1.8 D Street – | 47° 14’ 21.4” N | -122° 25’ 43.0” W |
| Tower CP 40 – | 47° 13’ 57.5” N | -122°28’ 5.0” W |
| Tower CP 63 – | 47° 12’ 19.9” N | -122° 29’ 9.2” W |
| Tower CP 65 – | 47° 12’ 9.3” N | -122° 29’ 7.2” W |
| Tower CP 69 Manitou – | 47° 11’ 48.1” N | -122° 29’ 5.3” W |
| Tower Intermediate 7.98 – | 47° 10’ 52.2” N | -122° 29’ 19.1” W |
| Tower 9.0 Century – | 47° 10’ 1.3” N | -122° 29’ 35.2” W |
| Tower 9.4 Prairie Junction – | 47° 9’ 44.0” N | -122° 29’ 38.2” W |
| Tower CP 99 – | 47° 9’ 16.3” N | -122° 29’ 48.1” W |
| Tower 10.1 Lakewood - | 47° 9’ 8.6” N | -122° 30’ 1.2” W |

Appendix A displays each tower location on a separate map illustrating the 300 foot radius surrounding each tower.

**Figure 1. Tower Location Map**



## B. ENVIRONMENTAL ELEMENTS

### 1. Earth

**a. General description of the site (circle one): Flat, rolling, hilly, steep slopes, mountainous, other…**

1. Tower 1.1 Portland Avenue - Flat
2. Tower 1.4 L Street - Flat
3. Tower 1.8 D Street – Flat
4. Tower CP 40 - Flat
5. Tower CP 63 - Flat
6. Tower CP 65 - Flat
7. Tower CP 69 Manitou - Flat
8. Tower Intermediate 7.98 - Flat
9. Tower 9.0 Century - Flat
10. Tower 9.4 Prairie Junction - Flat
11. Tower CP 99 - Flat
12. Tower 10.1 Lakewood - Flat

**b. What is the steepest slope on the site (approximate percent slope)?**

All proposed tower locations have slopes less than 1 percent.

**c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.**

The soils of the railroad right of way are compacted, engineered fill overlain with railroad ballast (small rocks and gravels). Towers 1 to 6 below are fully urbanized and are unmapped by the Natural Resources Conservation Service (NRCS) in a modern soil survey. Towers 7 to 12 below are mapped as the Spanaway series. This series consists of very deep, somewhat excessively drained soils that formed in glacial outwash. They are on terraces and plains at elevations of about 98 to 492 feet above mean sea level. Slopes are 0 to 15 percent. These soils are in a maritime climate with cool, dry summers and mild, wet winters. The original soils at Towers 1 to 6 were likely similar.

1. Tower 1.1 Portland Avenue – Urban area, unmapped by NRCS
2. Tower 1.4 L Street - Urban area, unmapped by NRCS
3. Tower 1.8 D Street – Urban area, unmapped by NRCS
4. Tower CP 40 - Urban area, unmapped by NRCS
5. Tower CP 63 - Urban area, unmapped by NRCS
6. Tower CP 65 - Urban area, unmapped by NRCS
7. Tower CP 69 Manitou – Urban area, unmapped by NRCS
8. Tower Intermediate 7.98 - Spanaway gravelly sandy loam
9. Tower 9.0 Century - Spanaway gravelly sandy loam
10. Tower 9.4 Prairie Junction - Spanaway gravelly sandy loam
11. Tower CP 99 - Spanaway gravelly sandy loam

12. Tower 10.1 Lakewood - Spanaway gravelly sandy loam

**d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.**

No, the area proposed for communication towers is relatively flat and not subject to landslides.

**e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.**

The communication towers are to be built on existing Sound Transit railroad Right of Way (ROW), the ROW is an existing compacted and graveled surface. Each tower footing will require an 8 cubic yard ($yds^3$) excavation. Electrical conduits and cables will be trenched to the existing control bungalows through narrow excavated trenches. Maximum excavation required for an individual conduit trench will not exceed 6 $yds^3$. Total excavation for all towers will not exceed 168 $yds^3$. All excavated material will be backfilled and restored to existing conditions. No additional grading or filling is planned.

**f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.**

Construction of the communication towers will be on existing developed surfaces. Construction will utilize standard erosion control Best Management Practices (BMPs) during the construction phase. Due to the existing conditions and the limited size of the disturbance, the potential for erosion to occur as a result of construction is extremely low.

**g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

The current site surfaces at the proposed communication towers consist of compacted, engineered soils overlain by railroad ballast (gravel and rock fragments). No increase in this existing surface is planned. The communication towers will be set on a four (4) foot square concrete base. The total concrete surface area for all twelve (12) of the proposed towers is 48 square feet.

**h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:**

Standard erosion control Best Management Practices (e.g. sediment fences, filter socks, wattles, etc. as appropriate) will be utilized during the construction phase.

**2. Air**

**a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke, greenhouse gases) during**

**construction and when the project is completed? If any, generally describe and give approximate quantities if known.**

The communication towers will not be responsible for any emissions to the air. Standard diesel powered construction equipment will be utilized during the construction phase. Each tower will require the use of 1 front end loader/excavator and a crane for approximately 4 days to construct. Appropriate Temporary Environmental Sediment Control and BMPs will be applied to the project during construction to minimize dust, runoff from the site and fuom truck wheels as needed.

**b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.**

No off-site sources of emissions will have an impact on this proposal

**c. Proposed measures to reduce or control emissions or other impacts to air, if any:**

None planned.

**3. Water**

**a. Surface:**

**1. Is there any surface water body on or in the immediate vicinity of the site (including year round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.**

No surface water bodies occur on the proposed tower sites. No surface water bodies occur within 300 feet of any of the proposed towers.

**2. Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If yes, please describe and attach available plans.**

No

**3. Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

No amount of fill or dredge material will be placed or removed from any Waters of the United States or Washington.

**4. Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

No

5. **Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

    - Tower 1.1 Portland Avenue – Surrounding area is mapped as within the 100-year floodplain of the Puyallup River. Tower location is to be constructed on elevated railroad roadbed 35.7 feet above the floodplain. Elevation determined by Aerometric Mapping, December, 2013.
    - Tower 1.4 L Street - No
    - Tower 1.8 D Street - No
    - Tower CP 40 - No
    - Tower CP 63 - No
    - Tower CP 65 - No
    - Tower CP 69 Manitou - No
    - Tower Intermediate 7.98 - No
    - Tower 9.0 Century - No
    - Tower 9.4 Prairie Junction - No
    - Tower CP 99 - No
    - Tower 10.1 Lakewood – No

6. **Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

    No

**b. Ground:**

1. **Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.**

    No

2. **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: Domestic sewage; industrial, containing the following chemicals . . . ; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

    No waste material will be discharged into the ground.

**c. Water runoff (including stormwater):**

1. **Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where**

**will this water flow? Will this water flow into other waters? If so, describe.**

Stormwater drainage from the tower sites will not be impeded. The Sound Transit railroad ROW is graded and drains into the Municipal Stormwater System.

2. **Could waste materials enter ground or surface waters? If so, generally describe.**

   No

**d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:**

No increased impacts from runoff are expected. No measures are proposed.

**4. Plants**

All tower sites are located on previously developed railroad right of way. No vegetation is present on the footprints of the tower locations.

**a. Check or circle types of vegetation found on the site:**

_____ deciduous tree: alder, maple, aspen, other
_____ evergreen tree: fir, cedar, pine, other
_____ shrubs
_____ grass
_____ pasture
_____ crop or grain
_____ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
_____ water plants: water lily, eelgrass, milfoil, other
_____ other types of vegetation

**b. What kind and amount of vegetation will be removed or altered?**

No vegetation is to be removed.

**c. List threatened or endangered species known to be on or near the site.**

No Threatened or Endangered (T&E) species are identified as present on the project or within 300 feet of any individual tower location.

**d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:**

None proposed.

**5. Animals**

**a. Circle any birds and animals which have been observed on or near the site or are known to be on or near the site** *(indicated by* **bold, underlined** *font)***:**

Bird sightings observed during site investigation included **crows, sparrows, and seagulls**. Other birds common to the area include **starlings, pigeons**, and **robins**.

No animals were observed during the site investigations. Urban animals potentially present include: **squirrels, opossums, rats, raccoons, feral cats and dogs.**

**b. List any threatened or endangered species known to be on or near the site.**

No threatened or endangered species (T&E) or priority habitats are present at any of the proposed tower locations. Data provided by the Washington Department of Fish and Wildlife Priority Habitats and Species database indicates that there are no T&E species occurrences within the 300 foot study area surrounding each tower site.

Sound Transit has obtained Endangered and/or Threatened Species lists and critical habitat lists from both National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) for the project area.

The following species are listed by NMFS as either threatened or endangered within the waters of Puget Sound and the Puyallup River:

- Endangered: Bocaccio (*Sebastes paucispinis*),
- Threatened: Canary rockfish (*Sebastes pinniger*), Yellow rockfish (*Sebastes ruberrimus*), Puget Sound Chinook (*Oncorhynchus tshawytscha*), Puget Sound Steelhead (*Oncorhynchus mykiss*)

Tower 10.1 Lakewood is the closest tower to the Puyallup River at 1,463 feet. Tower 1.8 D Street is the closest tower to the waters of Puget Sound (Commencement Bay) at 8,682 feet. Tower CP 40 is the closest tower to Puget Sound proper at 21,515 feet. It is not anticipated that species and/or habitats under the jurisdiction of NMFS are present at any of the 12 tower locations. The above species, while not located in the project area, have the potential to occur in the aforementioned water bodies.

The Essential Fish Habitat (EFH) designation for the Pacific salmon fishery includes all those streams, lakes, ponds, wetlands, and other water bodies, currently or historically accessible to salmon in Washington, Oregon, Idaho, and California, except above the impassable barriers identified by Pacific Fishery Management Council (PFMC, 1999). In estuarine and marine environments, proposed designated EFH extends from near-shore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone offshore of Washington, Oregon, and California north of Point Conception. The Pacific salmon management unit includes Chinook, coho, and pink salmon.

EFH for Pacific coast groundfish is generally defined as the aquatic habitat from the mean higher high water line, and the upriver extent of saltwater intrusion in river mouths seaward. The west coast groundfish management unit includes 83 species that typically live on or near the bottom of the ocean. Species groups include sharks and skates, rockfishes (55 species), flatfishes (12 species) and ground fishes.

EFH for coastal pelagic species is generally defined all marine and estuarine waters from the shoreline offshore above the thermocline. Coastal pelagics are schooling fish not associated with the ocean bottom that migrate in coastal waters. These fishes are primarily associated with the open ocean and coastal waters (PFMC, 1998), and are not likely to occur within the project area.

The project area does not contain aquatic environments either marine, freshwater, or wetlands that were historically or currently accessible to federally managed species; therefore EFH for federally managed Pacific salmon, Pacific coast groundfish, and coastal pelagics do not occur in the project area and will not be described here further.

The following species are listed by USFWS as either threatened or endangered within Pierce County, Washington:

- Endangered: Marsh Sandwort (*Arenaria paludicola*), Taylor's Checkerspot (*Euphydryas editha taylori*), Gray wolf (*Canis lupus*)
- Threatened: Marbled murrelet (*Brachyramphus marmoratus*), Northern Spotted owl (*Strix occidentalis caurina*), Streaked Horned lark (*Eremophila alpestris strigata*), Bull Trout (*Salvelinus confluentus*), Golden Paintbrush (*Castilleja levisecta*), Water howellia (*Howellia aquatilis*), Canada Lynx (*Lynx canadensis*)
- Proposed: Oregon Spotted frog (*Rana pretiosa*), Yellow-Billed Cuckoo (*Coccyzus americanus*), North American wolverine (*Gulo gulo luscus*), Roy Prairie pocket gopher (*Thomomys mazama glacialis*)

The proposed tower sites lie within highly urbanized areas of the Cities of Lakewood and Tacoma, Washington and do not provide for the biological, habitat and life history requirements for any of the federally listed threatened or endangered species with the potential to occur within Pierce County, Washington. The U.S. Fish and Wildlife (FWS) IPaC – Information, Planning, and Conservation System was queried to identify Threatened, Endangered, Candidate Species or critical habitats identified within the vicinity of the Project Area. The FWS provided an Official Species List. No occurrences of the FWS listed species were identified within the study area of the tower sites. Habitat for the listed species is not present at any of the proposed tower sites. No critical habitat is designated within the proposed tower sites.

**c. Is the site part of a migration route? If so, explain.**

No

**d. Proposed measures to preserve or enhance wildlife, if any:**

None proposed.

**6. Energy and natural resources**

**a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

The communication towers will be powered by electricity.

**b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

No, the communication towers cast insubstantial shadows which will have no effect on the potential use of solar energy by adjacent properties.

**c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

The communication towers are designed to utilize the minimum amount of electrical power to effectively enable communication with central control.

**7. Environmental health**

**a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? If so, describe.**

The proposed towers will not pose any chemical, fire, or hazardous environmental health hazards. The towers operate under the guidelines adopted by the FCC for evaluating human exposure to radiofrequency or electromagnetic fields (popularly referred to as EMF). At the rated transmitted power of the towers, the ground-level power densities are well below the exposure limits recommended by radiofrequency/microwave safety standards determined by the FCC in their publication OET 65. The antennas which will be installed on the towers transmit at less than 1,000 watts with the lowest point of the antenna above 10 meters (approximately 33 feet) qualifying the towers for categorical exclusion under the Federal Telecommunication Act of 1997.

**1. Describe special emergency services that might be required.**

No special emergency services will be required as a result of this proposal.

**2. Proposed measures to reduce or control environmental health hazards, if any:**

No measures required.

**b. Noise**

**1. What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?**

Ambient urban noise will have no effect on this project.

**2. What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.**

Short term noise associated with the proposed towers is limited to temporary equipment noise during construction. No noise is associated with the towers on a long-term basis.

**3. Proposed measures to reduce or control noise impacts, if any:**

Short-term noise associated with the construction of the towers will be limited to daytime hours. No measures are necessary for long-term noise control as there is no noise associated with the towers.

**8. Land and shoreline use**

**a. What is the current use of the site and adjacent properties?**

The current site use at all tower locations is Sound Transit railroad right of way. Adjacent properties at the individual tower sites include industrial and manufacturing facilities, retail operations, warehouses, housing, a cemetery, and railroad stations.

| | **Tower Identification** | **Adjacent Property Uses** |
|---|---|---|
| 1. | Tower 1.1 Portland Avenue - | Commercial enterprises, auto care, hotel |
| 2. | Tower 1.4 L Street - | Commercial enterprises, motel, gas station, limited housing |
| 3. | Tower 1.8 D Street – | Commercial enterprises, train station, restaurants, Freighthouse Square |
| 4. | Tower CP 40 - | Warehouses, manufacturing facilities |
| 5. | Tower CP 63 - | Warehouses, auto care, restaurants |
| 6. | Tower CP 65 - | Auto dealership, auto collision, South Tacoma Station |
| 7. | Tower CP 69 Manitou - | Commercial enterprises, auto care, manufacturing facilities |
| 8. | Tower Intermediate 7.98 - | Mountain View Memorial Park, Franz Bakery, manufacturing facilities |
| 9. | Tower 9.0 Century - | Coffee kiosk, Southgate Elementary School, commercial enterprises |

| | |
|---|---|
| 10. Tower 9.4 Prairie Junction - | Manufacturing enterprises, single family houses |
| 11. Tower CP 99 - | Lakewood Train Station, single family houses |
| 12. Tower 10.1 Lakewood - | Lakewood Train Station, commercial enterprises, multi-unit housing |

**b. Has the site been used for agriculture? If so, describe.**

No

**c. Describe any structures on the site.**

The towers will be built next to existing railroad control structures (Bungalows) which contain the electrical power and communication uplink equipment.

**d. Will any structures be demolished? If so, what?**

No structures will be demolished.

**e. What is the current zoning classification of the site?**

Towers 10.1 Lakewood, CP 99, 9.4 Prairie Junction, 9.0 Century, and Intermediate 7.98 of the Sound Transit rail corridor are zoned as Industrial Two (I2) in Lakewood, Washington. Towers CP 69 Manitou, CP 65, CP 63, CP 40, 1.8 D Street, 1.4 L Street, and 1.1 Portland Avenue are zoned as Manufacturing (M1) in Tacoma, Washington.

**f. What is the current comprehensive plan designation of the site?**

City of Lakewood, WA – Lakewood Station District
City of Tacoma, WA – Puget Sound Regional Councils VISION 2040 and *Transportation 2040* and Sound Transit's Regional Transit Long-Range Plan (2005)

**g. If applicable, what is the current shoreline master program designation of the site?**

Not applicable

**h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.**

The closest identified **"environmentally sensitive"** area is the wetland identified in the area of the Tacoma Trestle. This area lies between Towers 1.8 D Street and 1.4 L Street. This wetland will not be impacted by either of the proposed towers.

i. **Approximately how many people would reside or work in the completed project?**

There will be no occupancy of the tower sites.

j. **Approximately how many people would the completed project displace?**

No one will be displaced by the completed project.

k. **Proposed measures to avoid or reduce displacement impacts, if any:**

There will be no displacement impacts.

l. **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

The project is compatible with existing zoning and land use plans and goals of the Cities of Lakewood and Tacoma, WA.

**9. Housing**

a. **Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.**

No housing to be provided by the construction of the communication towers.

b. **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

No housing units will eliminated.

c. **Proposed measures to reduce or control housing impacts, if any:**

Not applicable.

**10. Aesthetics**

a. **What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?**

Project consists of construction of 12 communication towers. The towers are 60 foot self-supporting monopoles.

b. **What views in the immediate vicinity would be altered or obstruction:**

There is not expected to be any obstruction of existing views due to the construction of the communication towers. The proposed construction will have minimal impact on views in the immediate vicinity. The area of the towers is zoned for industrial use. The surrounding land uses are overwhelmingly industrial and commercial and are not sensitive to view impacts.

**c. Proposed measures to reduce or control aesthetic impacts, if any:**

No measures are proposed.

**11. Light and glare**

**a. What type of light or glare will the proposal produce? What time of day would it mainly occur?**

The towers will not produce any light or glare.

**b. Could light or glare from the finished project be a safety hazard or interfere with views?**

No light will be emitted from the towers.

**c. Proposed measures to reduce or control light and glare impacts, if any:**

Not applicable

**12. Recreation**

**a. What designated and informal recreational opportunities are in the immediate vicinity?**

No recreational opportunities are in the immediate vicinity of any of the proposed towers.

**b. Would the proposed project displace any existing recreational uses? If so, describe.**

No existing recreational will be displaced by the construction of the towers.

**c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

None

**13. Historic and cultural preservation**

A cultural resources report, the SEPA Cultural Resources Report for the Sound Transit Positive Train Control (PTC) Towers Project, to support the response to Question 13 is attached.

**a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

Two structures and two buildings listed on, or proposed for, national, state, or local preservation registers were identified next to the tower sites:

- Seven of the proposed PTC tower sites (CP 40, CP 63, CP 65, Intermediate 7.98, 9.0 Century, and 9.4 Prairie Junction) are located on or adjacent to the original Northern Pacific Railway alignment (eligible for NRHP); tower site CP 99 is near the alignment.
- Towers 1.4 L Street and 1.8 D Street are near the Chicago, Milwaukee, St. Paul & Pacific Railroad S-Turn Trestle (eligible for NRHP).
- Tower CP 40 is near to the Northwest Chair Company Building (eligible for NRHP) at 2201 S. Tacoma Way.
- Based on results of a survey of buildings, structures, and objects either on or next to the tower sites, one building adjacent to tower site CP 40, a warehouse at 2219 S. Tacoma Way, is recommended eligible for the NRHP under Criterion C. Formal evaluation and determination by the Washington Department of Archaeology and Historic Preservation of this warehouse has not yet been conducted.

**b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

One segment of the Old Pacific Highway/Lakeview Avenue Site (45PI767) was identified near (approximately 475 ft. northwest from) the proposed CP 99 tower site. Archaeological Site 45PI767 is a partially intact historic road alignment consisting of poured, coarse aggregate concrete sections. The site may be eligible for listing in the NRHP, however formal evaluation and determination by the Washington Department of Archaeology and Historic Preservation has not yet been conducted.

**c. Proposed measures to reduce or control impacts, if any:**

The proposed PTC tower project will not adversely impact any of the historic properties within the aboveground Area of Impact (adjacent tax parcels within one block of the tower locations) as described for each historic resource below:

- Construction of PTC towers will not adversely impact the Northern Pacific Railway alignment because it will not alter the integrity of the historic property. The basic alignment grade or design, original alignment location, and association with the Northern Pacific Prairie Line and E. S. Smith will be unaffected by the proposed tower construction. Substantial changes in land use on either side of the alignment have occurred since the early twentieth century to alter the integrity of setting, feeling and association since the period of significance, and the PTC tower is consistent with other modern equipment and utility towers along the right-of-way.
- Construction of PTC towers at the 1.4 L Street and 1.8 D Street sites will not adversely impact the Chicago, Milwaukee, St. Paul & Pacific Railroad S-Turn Trestle due to the distance between the trestle and the two sites (0.11 and 0.20 miles, respectively), low visibility of the towers from the trestle, and numerous existing utility poles and structures in the area that have already altered the integrity of setting, feeling, and association from the

period of significance. Sound Transit is planning to demolish and replace the trestle as part of another unrelated project in the near future.

- Construction of a PTC tower at the CP 40 site will not adversely impact the historic Northwest Chair Company building, currently known as the Nalley Valley Self-Storage building. The elevation that faces the proposed tower location has no fenestration, so the tower will not be visible from inside the building itself, and views of the tower from the property will be obscured by existing buildings and vegetation. In addition to the low visibility of the proposed tower from the historic property, numerous existing utility poles and structures in the area that have already altered the integrity of setting, feeling, and association from the period of significance.
- Similarly, construction of a PTC tower at the CP 40 site will not adversely impact the warehouse at 2219 S. Tacoma Way. Although this building is merely recommended eligible and has yet to be reviewed by DAHP, the proposed tower construction will have no impact on the building's integrity of location, design, materials, and workmanship that the most important characteristics to consider for eligibility under Criterion C, and the numerous existing utility poles and structures in the area have already altered the integrity of setting, feeling, and association from the period of significance in 1922.

Construction of the PTC towers will not adversely impact any known archaeological sites listed or eligible for the national, state, or local historic register within the archaeological Area of Impact (circular area of 1/8 mile radius from each tower location). Recommendations for ground disturbing activities undertaken for the Project include:

- No monitoring is recommended for excavation at any of the tower sites; Sound Transit has an on-call archaeologist if any accidental discoveries of archaeological remains are encountered during ground disturbing activities.
- Adoption of the Inadvertent Discovery Plan (IDP) in Appendix D of the accompanying SEPA Cultural Resources Report to prevent any ground-disturbing activities associated with the tower construction from adversely impacting archaeological sites. The IDP includes specific provisions for accidental discoveries of cultural resources associated with the known boundaries of archaeological site 45PI767 approximately 475-ft northwest of proposed tower site CP 99, and the Mountain View Memorial Park (45PI871), approximately 40-ft west of tower site Intermediate 7.98.

**14. Transportation**

**a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

1. Tower 1.1 Portland Avenue – Near E. Bay St. and E. 25th St., Tacoma, WA.
2. Tower 1,4 L Street – Near E. L St. and E. 25th Street, Tacoma, WA
3. Tower 1.8 D Street – Near E. D St. and E. 25th St., Tacoma, WA
4. Tower CP 40 – Near S. Hood St. and S. Steele St., Tacoma, WA

5. Tower CP 63 – Near S. 56th St. and S. Washington St., Tacoma, WA
6. Tower CP 65 – Near S. 60th St. and S. Adams St., Tacoma, WA
7. Tower CP 69 Manitou – Near S. 66th St. and S. Adams St., Tacoma, WA
8. Tower Intermediate 7.98 – Near SW 84th St. and Durango St. SW, Lakewood, WA
9. Tower 9.0 Century – Near 100th St. SW and Lakeview Avenue SW, Lakewood, WA
10. Tower 9.4 Prairie Junction – Near Pacific St. SW and Lakeview Ave. SW, Lakewood, WA.
11. Tower CP 99 – Near Pacific Hwy SW and Kendricks St. SW, Lakewood, WA
12. Tower 10.1 Lakewood – Near Pacific Hwy SW and 115th Ct. SW, Lakewood, WA

**b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The proposed communication towers are a component of Sound Transit's railroad infrastructure. The towers are not open to public access.

**c. How many parking spaces would the completed project have? How many would the project eliminate?**

Not applicable.

**d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

No

**e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

Communication towers are infrastructure components of Sound Transit's railroad system.

**f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

None

**g. Proposed measures to reduce or control transportation impacts, if any:**

None required

**15. Public Services**

**a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.**

The project will not require an increased need for public services.

**b. Proposed measures to reduce or control direct impacts on public services, if any.**

None required.

**16. Utilities**

**a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.**

The communication towers require electrical which is already present on site. No other utilities are required.

**b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.**

No new utilities are required for the proposed communication towers. No supplemental or temporary utility hookups will be required during construction.

**C. SIGNATURE**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: Stephen Laruana, CESCH

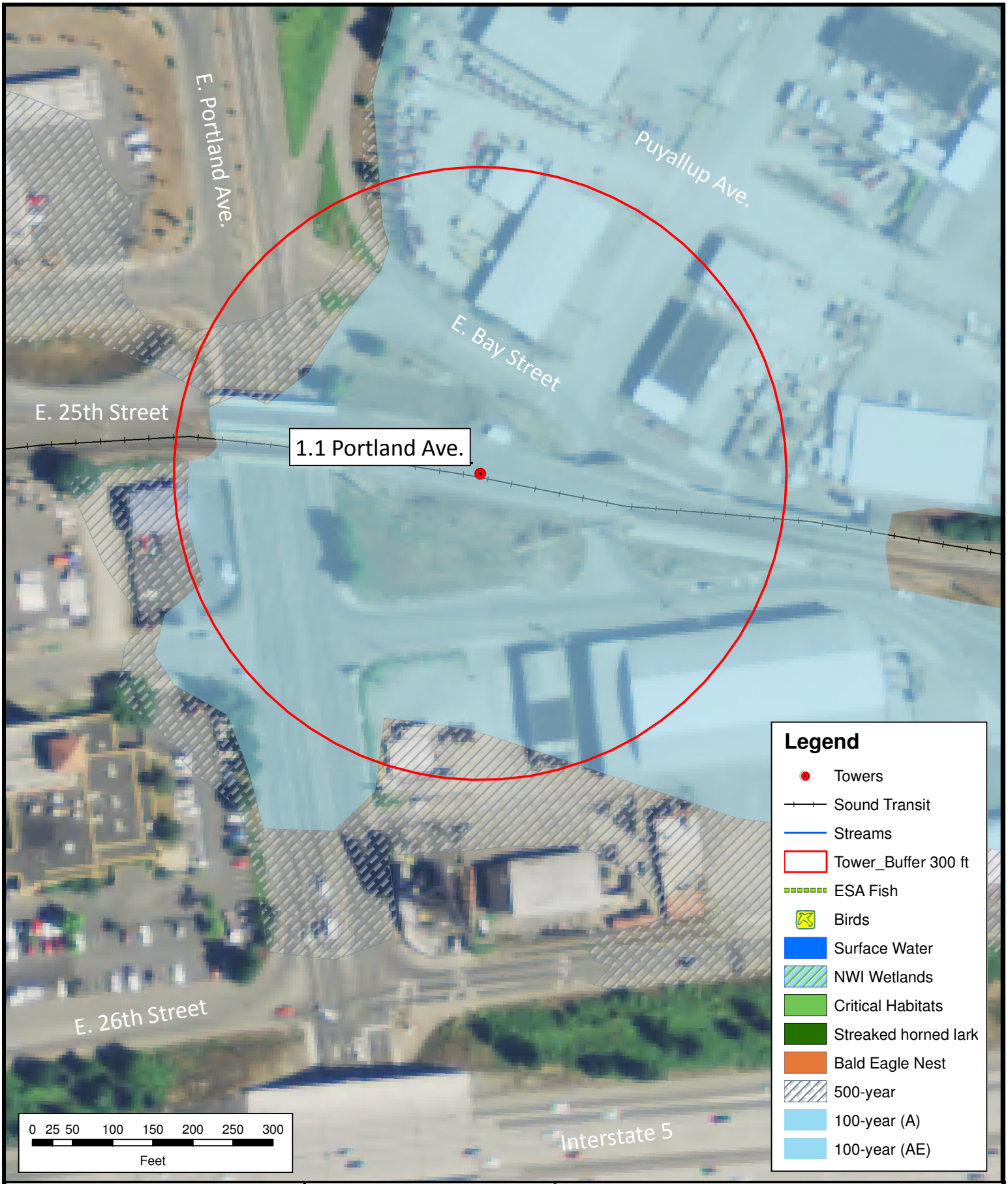
Date Submitted: April 11, 2014

# Positive Train Control Installation Program

# Lakewood and Tacoma, Washington

# SEPA Checklist

# APPENDIX A

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

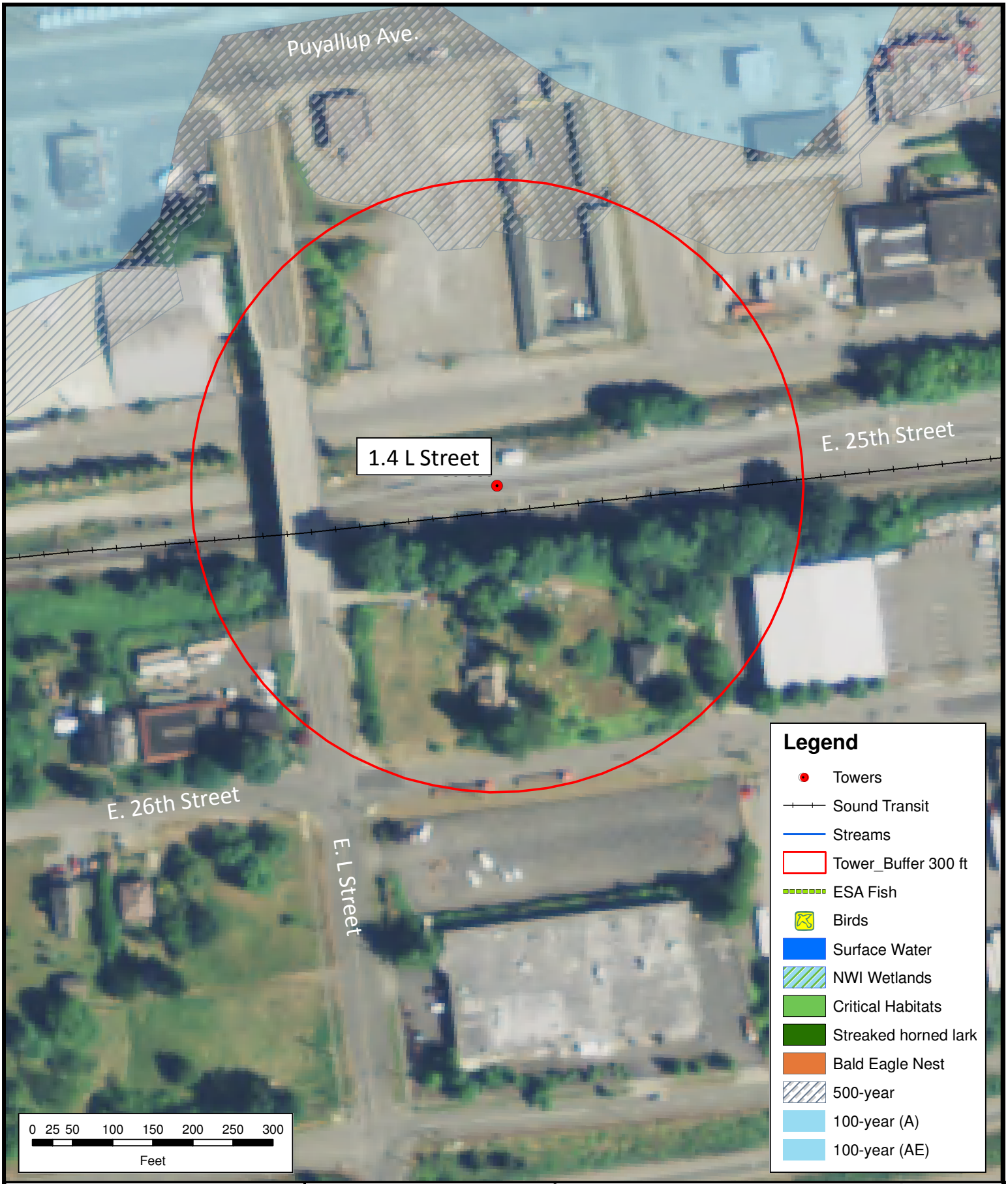
**Tower 1.1 Portland Ave.**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE 1**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

**Tower 1.4 L Street**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE 2**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

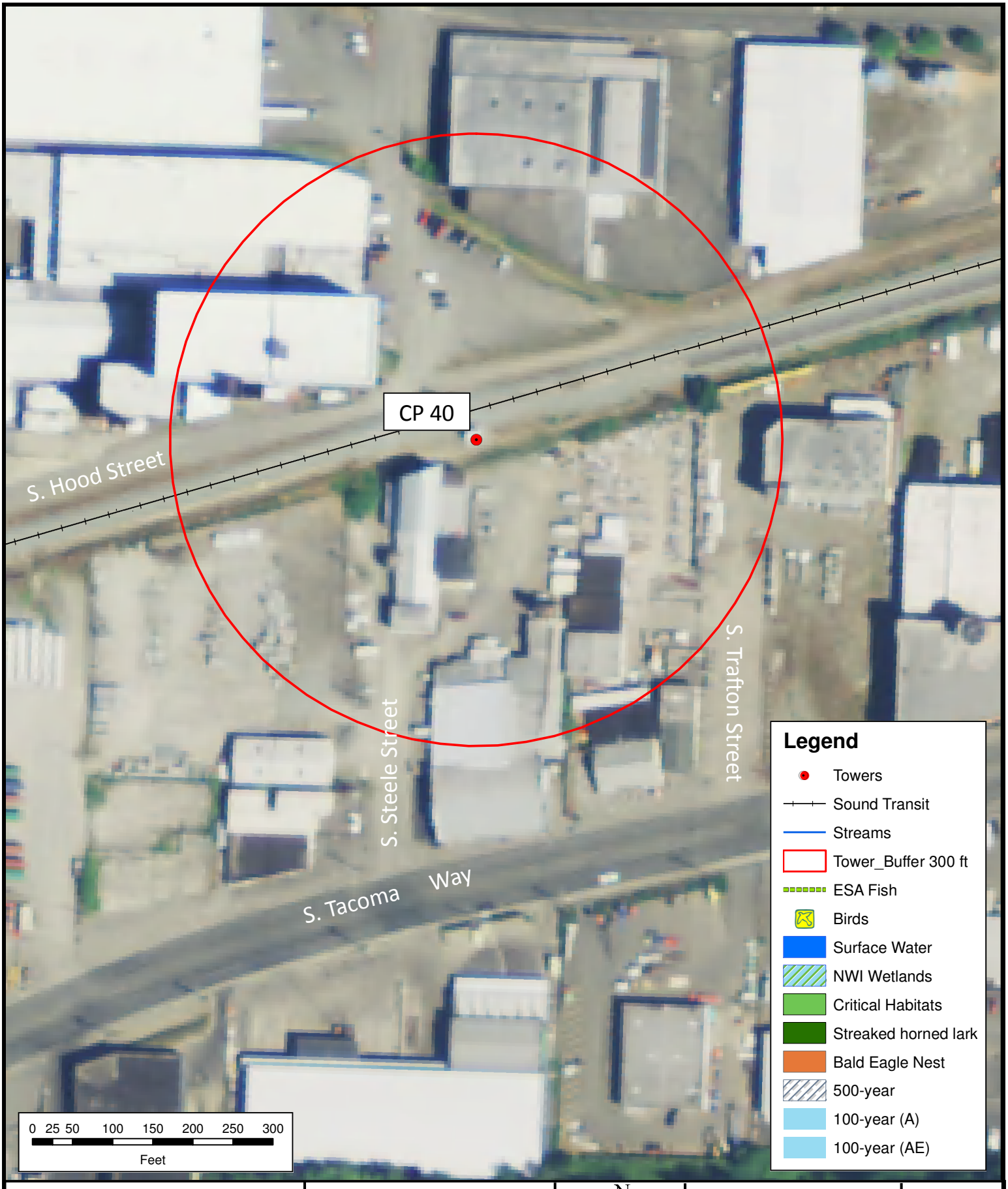
**Tower 1.8 D Street**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE**
**3**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

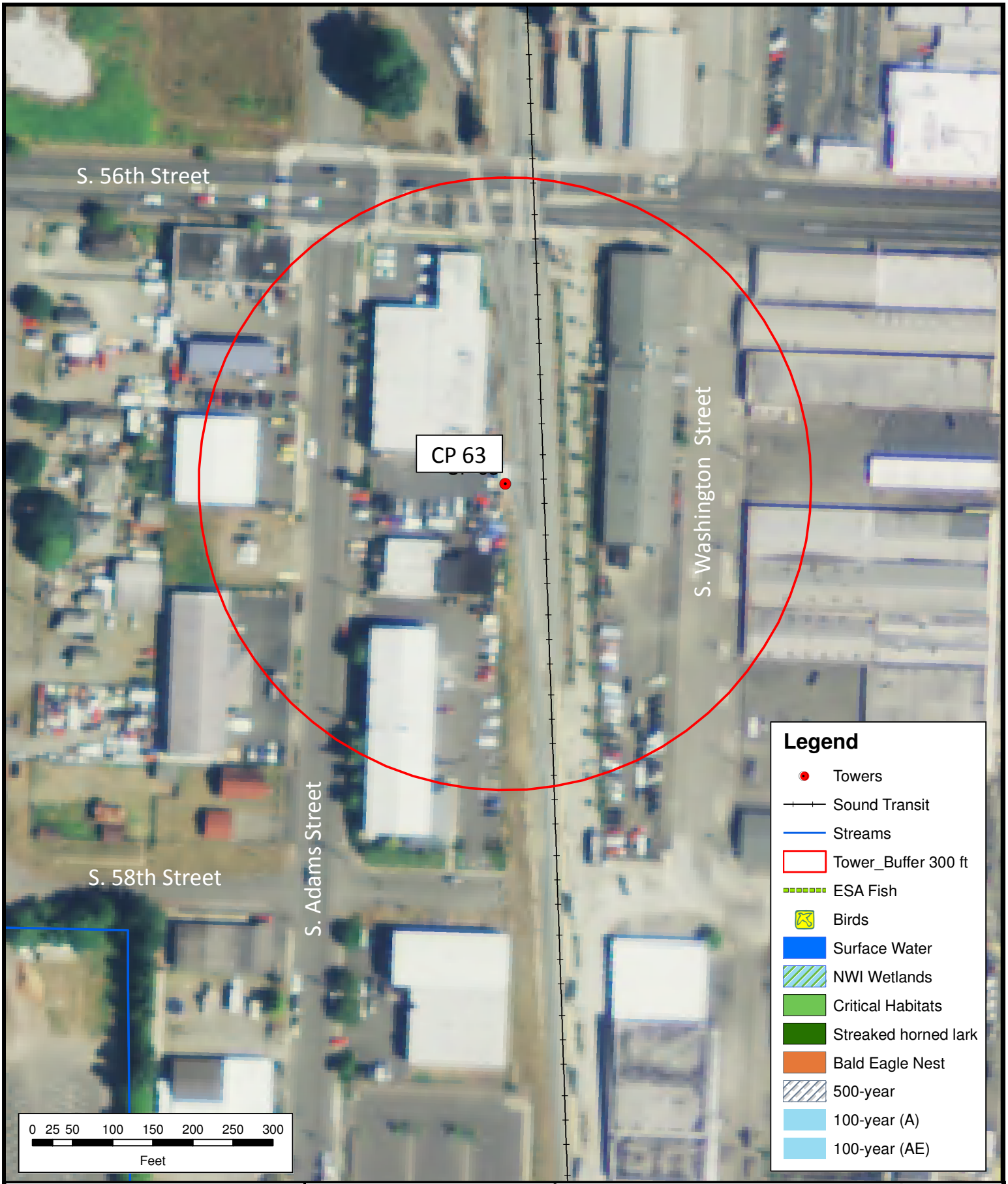
**Tower CP 40 Street**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE 4**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

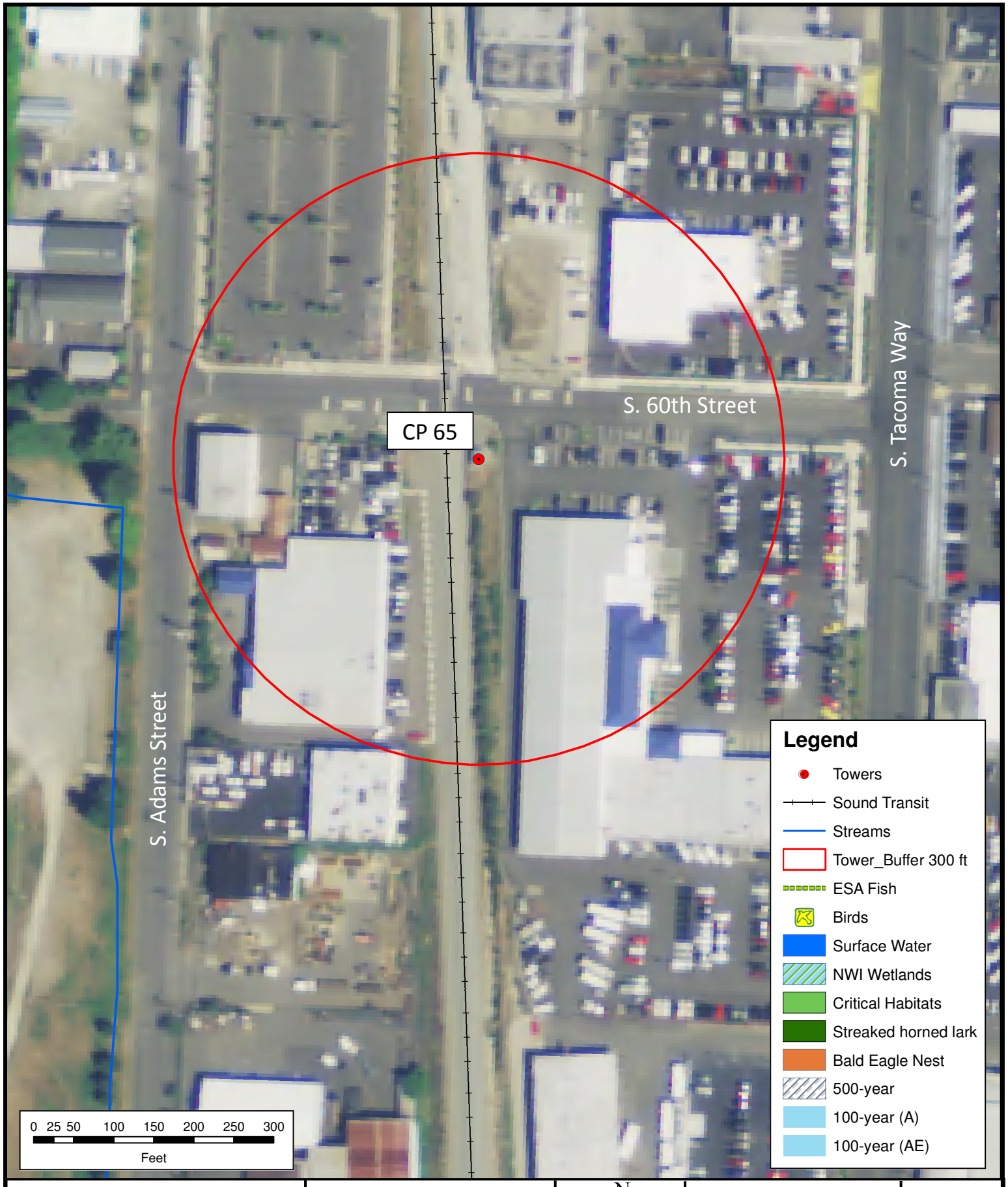
**Tower CP 63 Street**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE 5**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

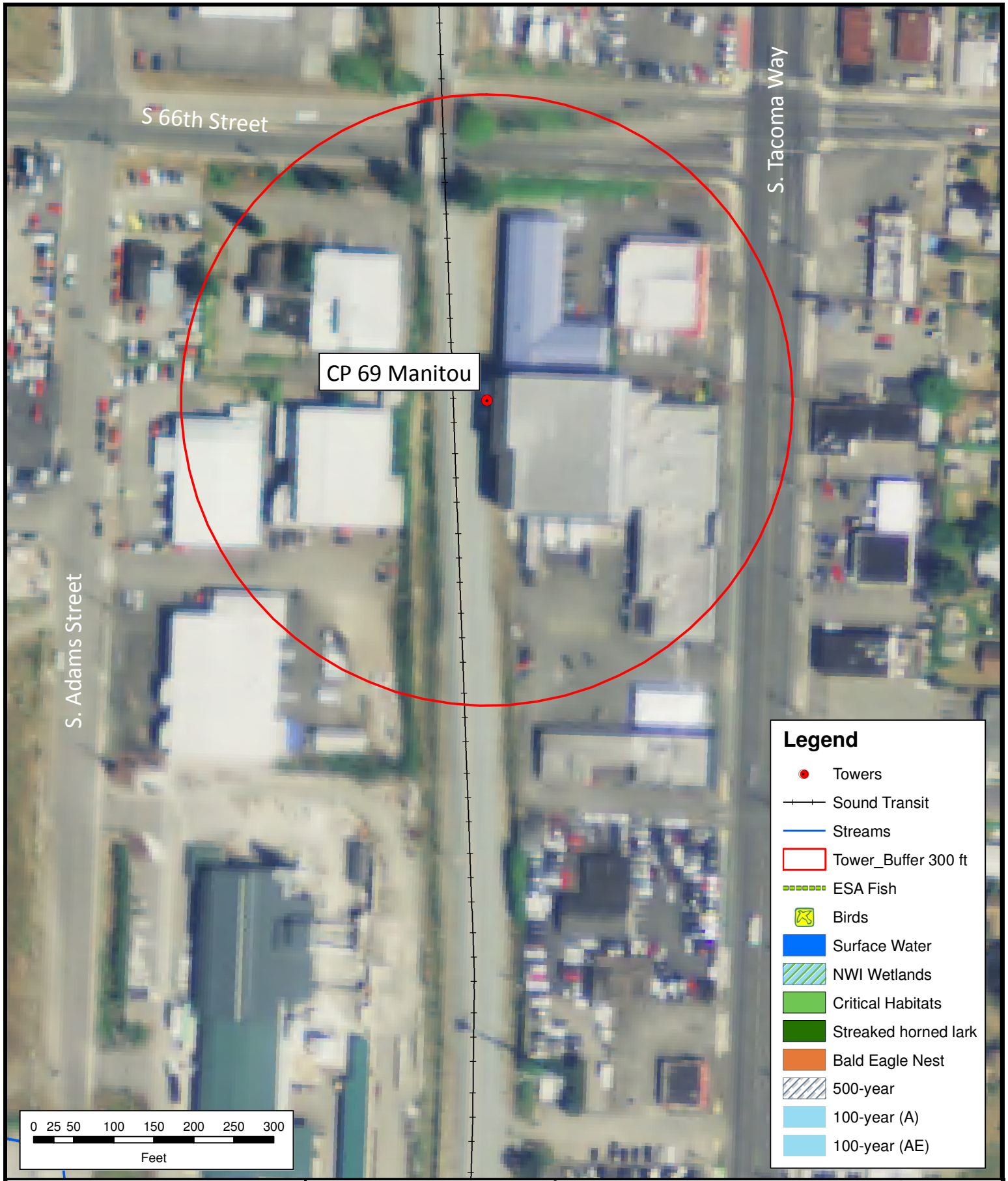
**Tower CP 65 Street**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE**
**6**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

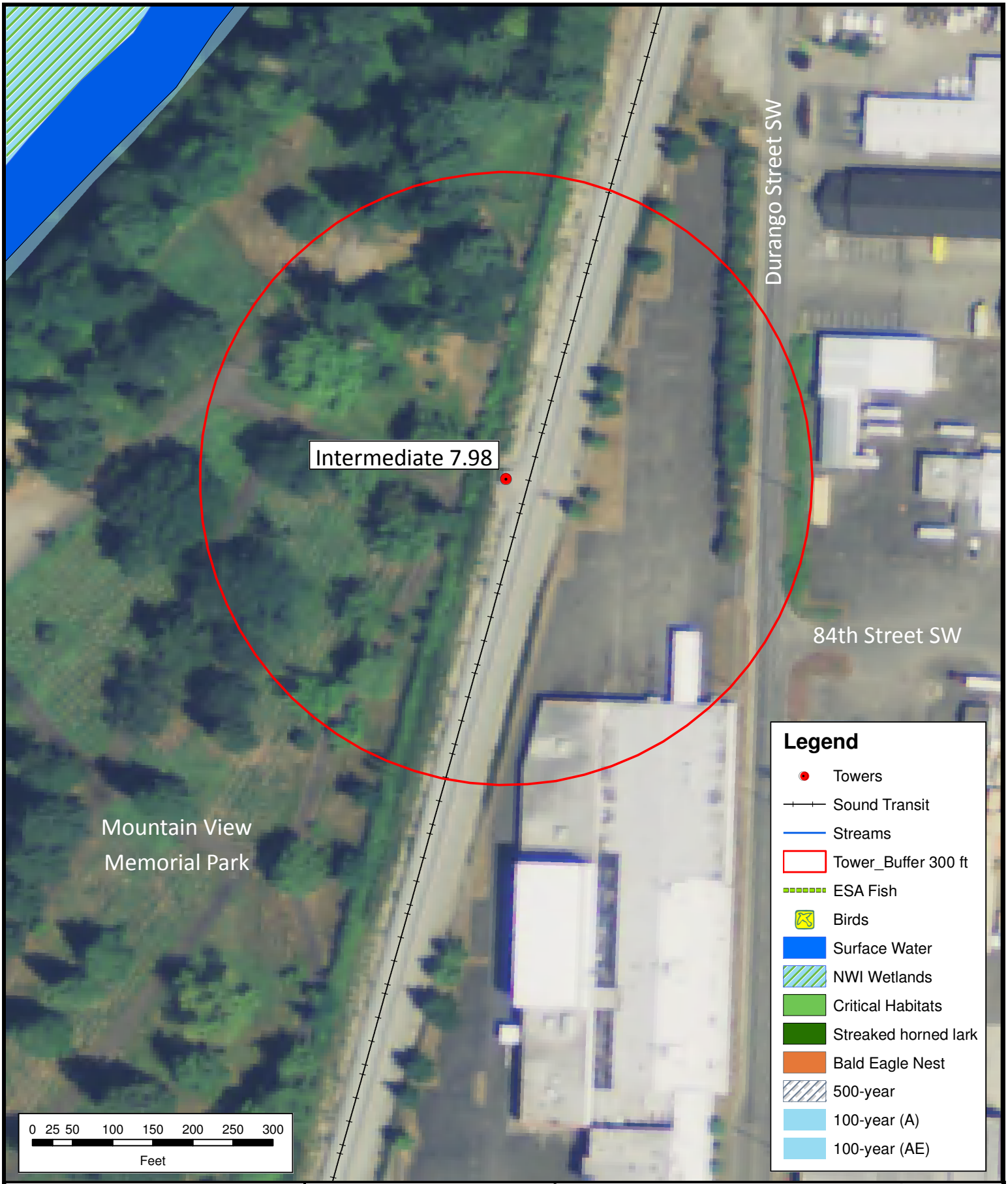
**Tower CP 69 Manitou**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE**
**7**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

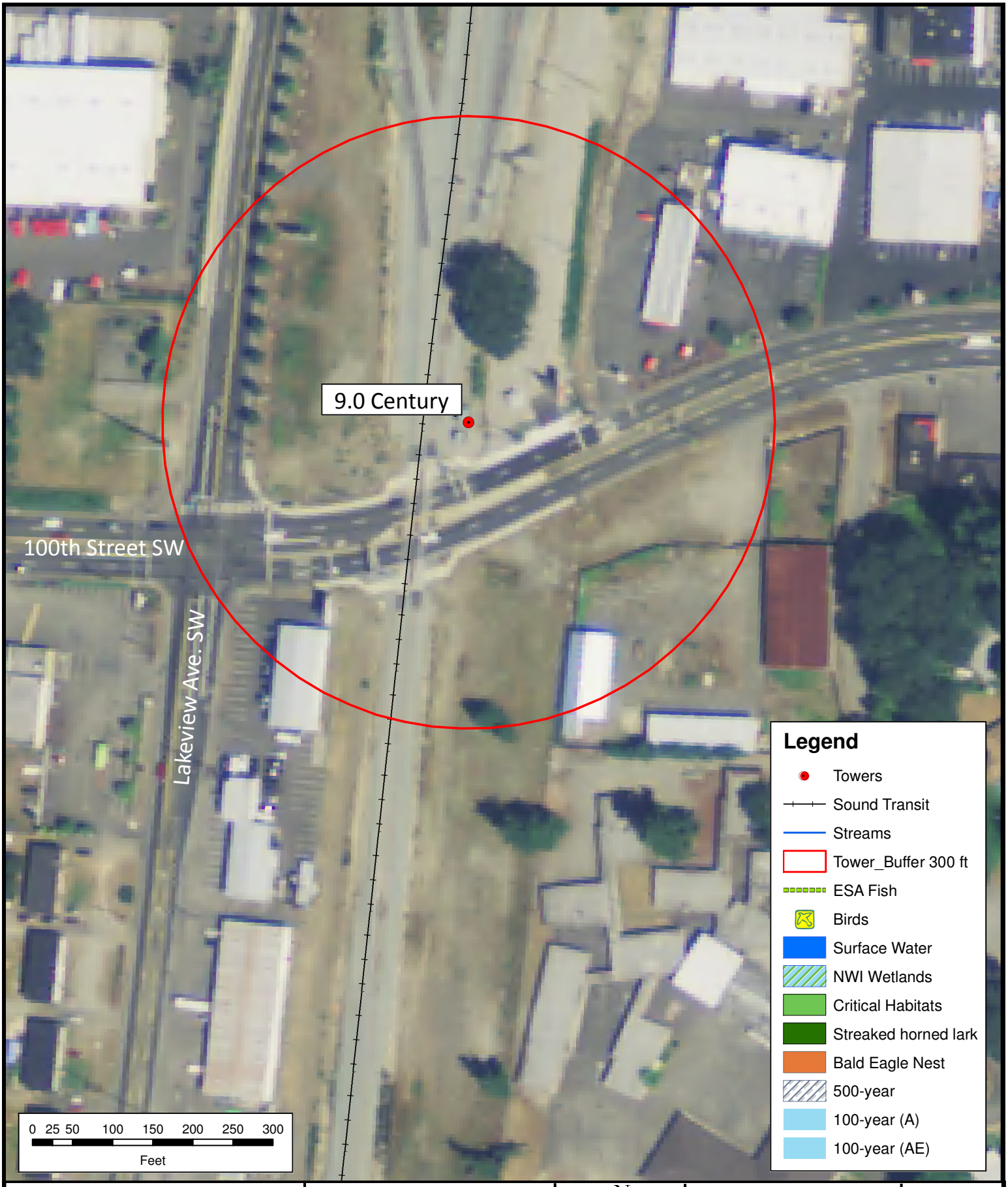
**Tower Intermediate 7.98**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE**
**8**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

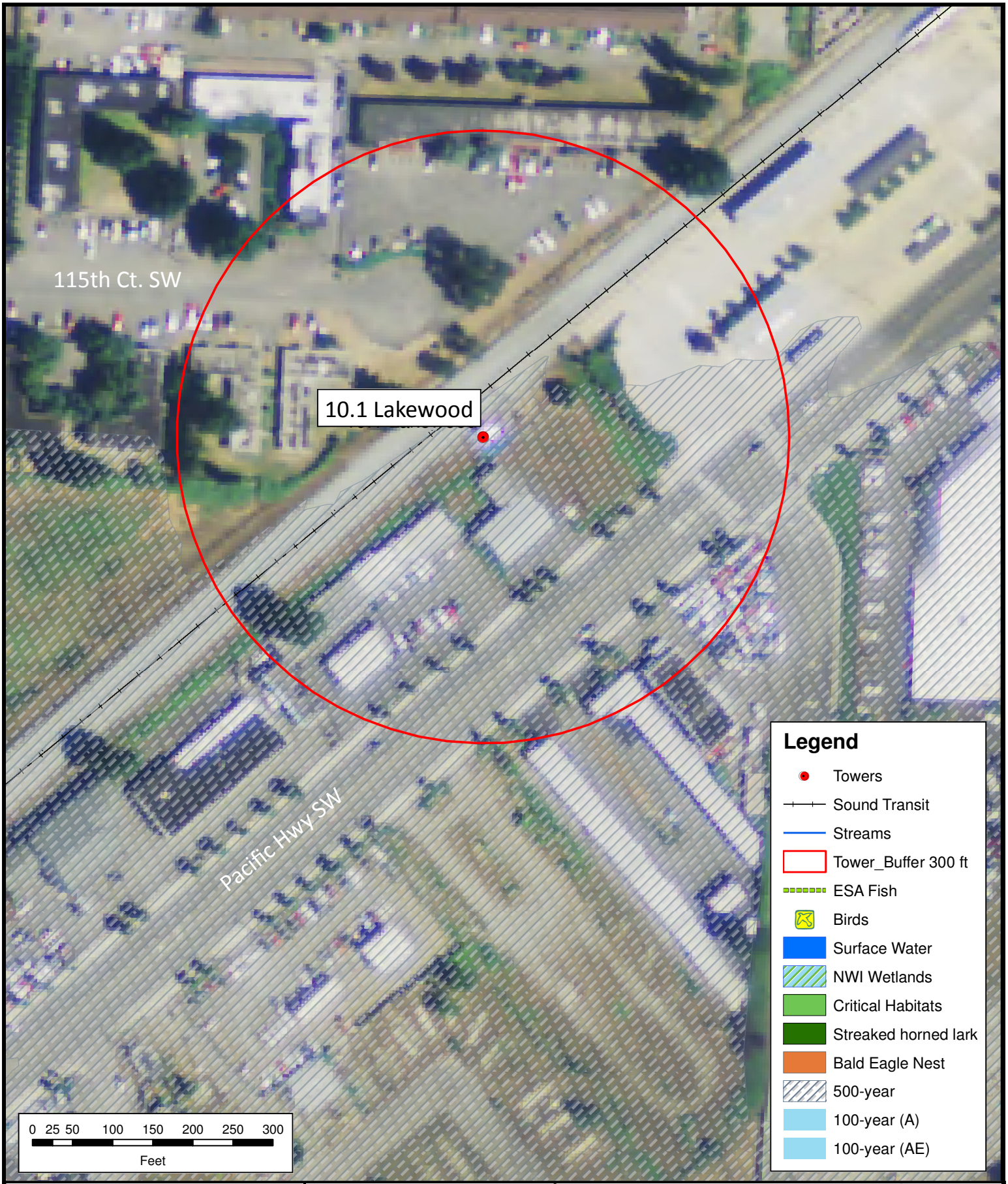
**Tower 9.0 Century**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE**
**9**

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**SOUND TRANSIT FCC NEPA REVIEW**
**TACOMA, WA**

**Tower 10.1 Lakewood**

N W E S

| | |
|---|---|
| PROJECT NO. | 138060 |
| DRAWN BY: | SCC |
| CHECKED BY: | LBB |

**300 Foot Buffer**

**FIGURE**
**28**

# Positive Train Control Installation Program

# Lakewood and Tacoma, Washington

# SEPA Checklist

# APPENDIX B

# APPENDIX B

# ESA SCREENING CHECKLIST

**Note: The purpose of this checklist is to gather and organize materials for environmental analysis required under the Endangered Species Act (ESA).**

| Sponsoring Agency<br>Sound Transit | | Date Submitted<br>February 28, 2014 |
|---|---|---|
| Project Title<br>Sound Transit Positive Train Control Wayside Tower Project | | |
| Project Location (Include Street Address, City, County)<br>Sound Transit proposes to construct twelve (12) communication towers along the Right of Way (ROW) of the Sound Transit rail system linking downtown Tacoma with Lakewood, Washington (WA) within Pierce County, Washington. | | |
| Project Contact:<br>Ms. Elma Borbe, Environmental Planner, Office of Environmental Affairs & Sustainability | Phone Number<br>(206) 398-5445 | E-mail Address (if available)<br>elma.borbe@soundtransit.org |

Please answer the following questions as completely as possible. If the question is not applicable, check "NA" in the space to the right

1. Describe the project and its purpose. Identify the jurisdiction(s) and watersheds (Watershed Resource Inventory Area/WRIA or Hydrologic Unit Code/HUC) in which the project is located.

   Sound Transit proposes to construct 12 new communication towers adjacent to the existing Sound Transit rail line within urban areas of the Cities of Lakewood and Tacoma, Pierce County, Washington (WA). The proposed towers will be 60 feet in height, self-supporting monopoles, and will not contain guy wires nor lighting. The construction foot print will be limited to a five-foot by five foot area at the base of the tower and no access roads or improvements will be required. The radio equipment of the towers will be powered from the adjacent pre-existing control structures through trenched conduits. The towers are the principal component of a federally mandated Positive Train Control (PTC) communication network. PTC systems are integrated command, control, communications, and information systems for controlling train movements with safety, security, precision, and efficiency. The locations of the 12 proposed towers are displayed on Figure 1 below.

   The proposed towers will be built on previously developed rail Right of Way (ROW) in conjunction with existing railroad infrastructure. The tower footings will be placed in a five foot by five foot excavation. Electrical conduits and cables will be trenched to the existing control bungalows through narrow excavated trenches. The section where the PTC Towers are proposed for the Sound Transit rail line will connect downtown Tacoma with the City of Lakewood, WA. The rail corridor area proposed for the PTC Communication Tower locations is zoned as an Industrial use area.

   **Water Resource Inventory Area**

   The northern and eastern one half of the proposed PTC Tower installation is located within Water Resource Inventory Area (WRIA) 10 – Puyallup-White (USGS Hydrologic Unit No. 17110014). The southern and western one half of the proposed PTC Tower installation is located within Water Resource Inventory Area (WRIA) 12 – Chambers-Clover (USGS Hydrologic Unit No. 17110019).

2. Have all other NEPA requirements been completed for this project?

☐ Yes ☒No Note: The ESA Screening Checklist is part of the NEPA Screening Report to be reviewed by Sound Transit.

If so, under which NEPA Class does this project fall? (Refer to DCE letter, FONSI, or ROD)

☐ Class I ☒ Class II ☐ Class III

3. Does the project qualify as a CE or a DCE?

☒ Yes ☐No

Does the project fit within the scope of the following Programmatic Biological Assessments?

NMFS: ☒ Yes ☐No (*Note:* If Yes, please refer to Appendix A: Best Management Practice/Conservation Measure Checklist for PBA use ~ attached)

USFWS (upon completion; pending approval as of February 2003): ☒ Yes ☐No

*(Note: If the project: 1) includes in-water work or work below the ordinary high water mark (OHWM) of a waterbody with listed salmonids, 2) adds > 5,000 square feet of impervious surface, OR 3) includes any new impervious surface within 150 feet of a stream waterbody with listed salmonids, it does not fit within these Programmatic Agreements.)*

4. Has the applicant obtained Endangered/Threatened Species lists and critical habitat lists from both National Marine Fisheries Service (NMFS) and U.S. Fish and Wildlife Service (USFWS) for the project area?

☒ Yes ☐No

List NMFS species/habitat here (and attach documentation):
The project area consists of 12 individual towers spaced at irregular distances along the Sound Transit rail line. Tower 10.1 Lakewood is the closest tower to the Puyallup River at 1,463 feet. Tower 1.8 D Street is the closest tower to the waters of Puget Sound (Commencement Bay) at 8,682 feet. Tower CP 40 is the closest tower to Puget Sound proper at 21,515 feet. It is not anticipated that species and/or habitats under the jurisdiction of NMFS are present at any of the 12 tower locations. The following species, while not located in the project area, have the potential to occur in the aforementioned water bodies adjacent to the project area.

Endangered: Bocaccio (*Sebastes paucispinis*),

Threatened: Canary rockfish (*Sebastes pinniger*), Yellow rockfish (*Sebastes ruberrimus*), Puget Sound Chinook (*Oncorhynchus tshawytscha*), Puget Sound Steelhead (*Oncorhynchus mykiss*)

Proposed: None

List USFWS species/habitat here (and attach documentation):
The proposed tower sites lie within highly urbanized areas of the Cities of Lakewood and Tacoma, Washington and do not provide for the biological, habitat and life history requirements for any of the federally listed threatened or endangered species with the potential to occur within Pierce County, Washington. The U.S. Fish and Wildlife (FWS) IPaC – Information, Planning, and Conservation System was queried to identify Threatened, Endangered, Candidate Species or critical habitats identified within the vicinity of the Project Area. The FWS provided an Official Species List. Illustrated below are the species identified within the vicinity of the Pierce County. However, no occurrences of the FWS listed species were identified within the study area of the tower sites. Habitat for the listed species is not present at any of the proposed tower sites. No critical habitat is designated within the proposed tower sites.

Endangered: Marsh Sandwort (*Arenaria paludicola*), Taylor's Checkerspot (*Euphydryas editha taylori*), Gray wolf (*Canis lupus*)

Threatened: Marbled murrelet (*Brachyramphus marmoratus*), Northern Spotted owl (*Strix occidentalis caurina*), Streaked Horned lark (*Eremophila alpestris strigata*), Bull Trout (*Salvelinus confluentus*), Golden Paintbrush (*Castilleja levisecta*), Water howellia (*Howellia aquatilis*), Canada Lynx (*Lynx canadensis*)

Proposed: Oregon Spotted frog (*Rana pretiosa*), Yellow-Billed Cuckoo (*Coccyzus americanus*), North American wolverine (*Gulo gulo luscus*), Roy Prairie pocket gopher (*Thomomys mazama glacialis*)

5. Has the applicant obtained Essential Fish Habitat (EFH) lists from the NMFS website (as required by the Magnuson-Stevens Fishery Conservation and Management Act (MSA)) for the project area?

☒ Yes ☐No

List Essential Fish Habitat here (and attach documentation):

The EFH designation for the Pacific salmon fishery includes all those streams, lakes, ponds, wetlands, and other water bodies, currently or historically accessible to salmon in Washington, Oregon, Idaho, and California, except above the impassable barriers identified by Pacific Fishery Management Council (PFMC, 1999). In estuarine and marine environments, proposed designated EFH extends from near-shore and tidal submerged environments within state territorial waters out to the full extent of the exclusive economic zone offshore of Washington, Oregon, and California north of Point Conception (PFMC 1999). The Pacific salmon management unit includes Chinook, coho, and pink salmon.

EFH for Pacific coast groundfish is generally defined as the aquatic habitat from the mean higher high water line, and the upriver extent of saltwater intrusion in river mouths seaward. The west coast groundfish management unit includes 83 species that typically live on or near the bottom of the ocean. Species groups include sharks and skates, rockfishes (55 species), flatfishes (12 species) and ground fishes.

EFH for coastal pelagic species is generally defined all marine and estuarine waters from the shoreline offshore above the thermocline. Coastal pelagics are schooling fish not associated with the ocean bottom that migrate in coastal waters. These fishes are primarily associated with the open ocean and coastal waters (PFMC, 1998), and are not likely to occur within the project area.

The project area does not contain aquatic environments either marine, freshwater, or wetlands that were historically or currently accessible to federally managed species; therefore EFH for federally managed Pacific salmon, Pacific coast groundfish, and coastal pelagics do not occur in the project area and will not be described here further.

6. List the names of your partners for the project. Identify the project lead agency. ☒ N/A

This is a Sound Transit project with the Federal Communication Commission (FCC) acting as the NEPA Lead Agency.

7. Check the federal permits needed for your project. List the numbers of the nationwide permits if needed.

| | N/A | Pending | Approved |
|---|---|---|---|
| ACOE Nationwide _____ | ☒ | ☐ | ☐ |
| ACOE Individual _____ | ☒ | ☐ | ☐ |
| NPDES (Gen. or Ind.) _____ | ☐ | ☒ | ☐ |
| Other _____ | ☐ | ☐ | ☐ |

| 8. Check State and local permits needed for your project. Circle jurisdiction. | | N/A | Pending | Approved |
|---|---|---|---|---|
| | HPA | ☒ | ☐ | ☐ |
| | Surface Mining | ☒ | ☐ | ☐ |
| | Forest Practices | ☒ | ☐ | ☐ |
| | Shoreline | ☒ | ☐ | ☐ |
| | Shoreline Exemption | ☒ | ☐ | ☐ |
| | Clearing and Grading | ☒ | ☐ | ☐ |
| | Building or Subdivision | ☒ | ☐ | ☐ |
| | Sensitive Areas Ordinance | ☒ | ☐ | ☐ |
| | Other _____ | ☐ | ☐ | ☐ |

9. Which federal, State, or tribal agencies have you contacted regarding your project and its impacts? ☐ N/A

The following tribes have been contacted individually and through the Federal Communications Commission's (FCC) Tower Construction Notification System (TCNS): Muckleshoot Indian Tribe, Puyallup Tribe of Indians, Suquamish Tribe, and Tulalip Tribes of the Tulalip Reservation, Yakama Nation, Cowlitz Indian Tribe, Skokomish Indian Tribe, and the Nisqually Indian Tribe. The Washington State Historic Preservation Officer – Office of Archeology & Historic Preservation and the Washington State Department of Archeology and Historic Preservation.

Describe any modifications to the project as a result of these contacts:

None

10. What is the specific location of your project? Provide the zoning designation and the ¼ section, section, township, WRIA(s), and range.

Sound Transit proposes to construct twelve (12) communication towers along the Right of Way (ROW) of the Sound Transit rail system linking downtown Tacoma with Lakewood, Washington (WA). The communication towers will be installed as part of a Positive Train Control (PTC) system to provide continuous communication of train locations. Installation of the PTC system will improve safety of rail traffic. The purpose of this report is to describe the environmental conditions present at the following proposed tower locations:

| **Tower Identification** | **Latitude** | **Longitude** | **SEC. TWP. RNG.** |
|---|---|---|---|
| **Water Resource Inventory Area (WRIA) 10 – Puyallup-White:** | | | |
| Tower 1.1 Portland Avenue – | 47° 14’ 27.9” N | -122° 24’ 36.8” W | NW ¼ S.10 20N 3E |
| Tower 1.4 L Street – | 47° 14’ 27.0” N | -122° 24’ 58.8” W | NW ¼ S.10 20N 3E |
| Tower 1.8 D Street – | 47° 14’ 21.4” N | -122° 25’ 43.0” W | W ½ DLC.37 20N 3E |
| Tower CP 40 – | 47° 13’ 57.5” N | -122°28’ 5.0” W | SE ¼ S.7 20N 3E |
| **Water Resource Inventory Area (WRIA) 12 – Chambers-Clover:** | | | |
| Tower CP 63 – | 47° 12’ 19.9” N | -122° 29’ 9.2” W | N ½ DLC.40 20N 2E |
| Tower CP 65 – | 47° 12’ 9.3” N | -122° 29’ 7.2” W | S ½ DLC.40 20N 2E |
| Tower CP 69 Manitou – | 47° 11’ 48.1” N | -122° 29’ 5.3” W | NE ¼ S.25 20N 2E |
| Tower Intermediate 7.98 – | 47° 10’ 52.2” N | -122° 29’ 19.1” W | SE ¼ DLC.37 20N 2E |
| Tower 9.0 Century – | 47° 10’ 1.3” N | -122° 29’ 35.2” W | NE ¼ S.1 19N 2E |
| Tower 9.4 Prairie Junction – | 47° 9’ 44.0” N | -122° 29’ 38.2” W | SE ¼ S.1 19N 2E |
| Tower CP 99 – | 47° 9’ 16.3” N | -122° 29’ 48.1” W | NW ¼ S.12 19N 2E |
| Tower 10.1 Lakewood - | 47° 9’ 8.6” N | -122° 30’ 1.2” W | NW ¼ S.12 19N 2E |

Towers 10.1 Lakewood, CP 99, 9.4 Prairie Junction, 9.0 Century, and Intermediate 7.98 of the Sound Transit rail corridor are zoned as Industrial Two (I2) in Lakewood, Washington. Towers CP 69 Manitou, CP 65, CP 63, CP 40, 1.8 D Street, 1.4 L Street, and 1.1 Portland Avenue are zoned as Manufacturing (M1) in Tacoma, Washington.

Does the project occur within an existing transportation corridor?

☒ Yes ☐No

It is a transportation corridor

11. Is the project within 150 feet of a lake, river, stream or bay, etc.? ☐ Yes ☒No

If so, name the waterbodies.

Do these waterbodies contain listed salmonids or bull trout? ☐ Yes ☐No

If so, name the listed species and agency with jurisdiction (USFWS or NMFS).

12. a. Will blasting or pile-driving occur within 1 mile of suitable owl or murrelet habitat (specifically, old growth tree(s) or forest)? ☐ Yes ☒No (if no, go to 12b)

b. Is the project within 0.25 miles of suitable owl or murrelet habitat? ☐ Yes ☒No

13. a. Will blasting or pile-driving occur within 1 mile of a known bald eagle nest? (Contact the State Department of Fish & Wildlife for nest locations.) ☐ Yes ☒No (must answer both 13a and 13b)

b. Is the project within 0.5 miles (line-of-sight) or 0.25 miles (non-line-of-sight) of a bald eagle nest, wintering concentration, roost, or foraging area?

☐ Yes ☒No

14. What is the size of the project (list area or length of disturbance), the amount of new impervious surface, and the total impervious surface? ☐ N/A

The communication towers are to be built on existing Sound Transit railroad Right of Way (ROW), the ROW is an existing compacted and graveled surface. Each tower footing will require an 8 cubic yard ($yds^3$) excavation. Electrical conduits and cables will be trenched to the existing control bungalows through narrow excavated trenches. Maximum excavation required for an individual conduit trench will not exceed 6 $yds^3$. Total excavation for all towers will not exceed 168 $yds^3$. All excavated material will be backfilled. No additional grading or filling is planned.

***In answering the following questions, please describe the impacts assuming no mitigation:***

**IMPACT ASSESSMENT**

15. Describe the potential beneficial and adverse impacts upon aquatic resources that will be caused by construction of the project: ☒ N/A

The project occurs on existing Sound Transit Right of Way. There are no wetlands present at any of the 12 PTC Tower sites. Construction best management practices (BMPs) such as silt fencing, compost socks, application of temporary seeding or mulching for soil stabilization, or other techniques would be implemented. A Temporary Erosion and Sediment Control Plan (TESC) and a Stormwater Pollution Prevention Plan (SWPPP) would be required to prevent sediment transport from the project area to water bodies as a result of grading and excavation of on-site soils.

16. Describe the potential beneficial and adverse impacts upon aquatic resources resulting from the maintenance, use, or operation of the project (post-construction impacts): ☒ N/A

The proposed action is not anticipated to have any adverse impacts upon aquatic resources resulting from maintenance, use, or operation of the proposed action.

17. Describe the potential beneficial and adverse impacts upon terrestrial resources that will be caused by construction of the project: ☒ N/A

The proposed action is not anticipated to have any adverse impacts to terrestrial resources. The majority of work would be completed within the existing railroad right-of-way. There is a potential for a short term increase in noise and human activity during construction; however, the location of construction within a highly industrialized area with transportation corridors nearby, the proposed action is not anticipated to have any adverse impacts upon terrestrial resources. In addition, no native tree or vegetation removal would be required.

18. Describe the potential beneficial and adverse impacts upon terrestrial resources resulting from the maintenance, use, or operation of the project (post-construction impacts): ☒ N/A

Installation the PTC towers are expected to have no impact upon terrestrial resources.

**MITIGATION**

19. Is the project likely to alter the water quality of any water bodies such as bays, estuaries, lakes, streams, rivers or wetlands (through sedimentation, urban runoff, toxics, turbidity, etc.)?

☐ Yes ☒ No (If yes, answer a and b.)

a. What mitigation is proposed for construction impacts?

b. What mitigation is proposed for long-term impacts?

20. Will the project discharge water or generate runoff to any water bodies such as bays, estuaries, lakes, streams, rivers or wetlands?

☐ Yes ☒No (If yes, answer a and b.)

a. What mitigation is proposed for construction impacts?

b. What mitigation is proposed for long-term impacts?

21. Are clearing and grading activities part of the project? What is the area of direct disturbance? Include soil-disturbing activities, tree/shrub removal, and alteration of upland habitat.

☐ Yes ☐ No (If yes, answer a and b.)

The communication towers are to be built on existing Sound Transit railroad Right of Way (ROW), the ROW is an existing compacted and graveled surface. Each tower footing will require an 8 cubic yard ($yds^3$) excavation. Electrical conduits and cables will be trenched to the existing control bungalows through narrow excavated trenches. Maximum excavation required for an individual conduit trench will not exceed 6 $yds^3$. Total excavation for all towers will not exceed 168 $yds^3$. All excavated material will be backfilled. No additional grading or filling is planned.

a. What mitigation is proposed for construction impacts?

Standard erosion control Best Management Practices will be utilized during construction to control runoff from the Project Area.

b. What mitigation is proposed for long-term impacts?

None

22. Will the project remove or modify riparian vegetation within 150 feet of a water body?

☐ Yes ☒ No (If yes, answer a and b.)

a. What mitigation is proposed for construction impacts?

b. What mitigation is proposed for long-term impacts?

23. Will the project place a structure within—or cause any change to—the bed or banks of a body of water?

☐ Yes ☒ No (If yes, answer a and b.)

a. What mitigation is proposed for construction impacts?

b. What mitigation is proposed for long-term impacts?

24. Will the project place fill or structures within any 100-year floodplain?

☐ Yes ☒ No (If yes, answer a and b.)

a. What mitigation is proposed for construction impacts?

b. What mitigation is proposed for long-term impacts?

25. Will the project divert water to or from the bay, estuary, lake, stream, river or wetland?

☐ Yes ☒ No (If yes, answer a and b.)

a. What mitigation is proposed for construction impacts?

b. What mitigation is proposed for long-term impacts?

26. Will construction and/or operation of the project produce noise above ambient levels?

☒ Yes ☐No

If so, explain:

The project area is located within the existing Right of Way of the Sound Transit railroad. Existing noise levels near the tracks are high due to both rail and urban traffic. Ambient noise levels will not increase as a result of the installation of the PTC towers. During construction of the PTC towers there would be temporary increases in sound levels near active areas of construction and along the trackside access used for construction vehicles. Temporary noise increases will be due to the construction equipment used which will consist of standard diesel powered construction equipment. Each tower will require the use of 1 front end loader/excavator and a crane for approximately 4 days to construct.

27. Has all necessary environmental documentation been provided to Sound Transit (request letters, agency response documentation, permit approvals)?

☒ Yes ☐No

***Appendix A***
***Programmatic Biological Assessment with NMFS/NOAA Fisheries (Expires 2007)***
***Best Management Measures (BMP) / Conservation Measures (CM) Checklist***
***For PBA Use***

Please confirm use of the following measures in your PBA project. If the question is not applicable, check "NA" in the space to the right and provide an explanation of why.

**Conservation Measures During Construction**

*Exposed Soils/Riparian Vegetation:*

☒ Yes ☐No ☐N/A Minimize the areal extent of exposed soil at any given time. Stabilize all unstable slopes with the potential to impact listed fish-bearing waters.

☐ Yes ☐No ☒N/A Replant disturbed riparian areas outside of the 150 foot setback with native species at a 2:1 ratio, including the removal of mature trees (greater than 6 inches diameter breast height, or dbh).

☐ Yes ☐No ☒N/A Do not place temporary material storage piles (>12 hours storage) in the 100-year floodplain during the rainy season unless storage occurs when flooding is not imminent, and storage piles with erosive material are covered with plastic tarps (or similar) and surrounded with erosion control devices.

☒ Yes ☐No ☐N/A Conduct extensive soil-disturbing work, including excavation, in the "dry" season (generally from June to October).

☒ Yes ☐No ☐N/A Prepare a Temporary Erosion and Sediment Control (TESC) Plan prior to construction to identify standard erosion and sediment control procedures.

Sto*rmwater Maintenance:*

☐ Yes ☐No ☒N/A Develop and implement a Stormwater Site Plan for > 1 acres of clearing, grading, or grubbing.

☒ Yes ☐No ☐N/A No untreated, undetained stormwater or dewatering will leave the limits of the construction site.

☒ Yes ☐No ☐N/A Discharged water will not exceed existing (baseline) conditions based on a 2-year storm event.

*Spill Controls*

☐ Yes ☐No ☒N/A Restrict vehicle use in wetland and/or riparian areas.

☐ Yes ☐No ☒N/A Maintain a 300 ft setback for construction staging areas and equipment refueling near wetlands, streams, rivers, or drainages.

☐ Yes ☐No ☒N/A Prepare a Spill Prevention, Containment, and Control Plan (SPCCP) prior to construction to address potentially toxic materials used on-site during construction.

☒ Yes ☐No ☐N/A Keep spill clean-up equipment available onsite during construction, and include a spill control separator in the overall drainage system, if necessary.

☐ Yes ☐No ☒N/A Paving, chip sealing, and/or painting should occur in dry weather. Use 2-gallon pails and drip pans/protective devices when available.

☒ Yes ☐No ☐N/A For projects involving concrete, establish concrete truck chute cleanout areas to properly contain wet concrete. Protect all inlets and catchments from fresh concrete, tackifier, paving, or paint stripping if inclement weather unexpectedly occurs.

☒ Yes ☐No ☐N/A Collect and dispose debris accumulations prior to fresh water flushing. Use clean water only.

☒ Yes ☐No ☐N/A Clean paint materials and maintenance equipment outside of surface waters. Do not discharge cleaning

runoff into surface waters.

**Long-Term Conservation Measures**

☐ Yes ☐No ☒N/A All construction & operation will occur greater than 150 feet from a listed salmonid-bearing waterbody.

☐ Yes ☐No ☒N/A Oil-water separators, bioswales, or other appropriate water quality treatment will be provided for 100% of all new and disturbed impervious surfaces..

☐ Yes ☐No ☒N/A Stormwater infiltration facilities will be designed with appropriate infiltration conditions and will be upgraded to handle increased flows or treatment.

☐ Yes ☐No ☒N/A Stream modifications or in-stream structures will not occur.